

REMARKS

Upon entry of the present amendment, claims 1, 2, 7, 10, 12-14 and 21 will have been amended to more clearly define the features of the present invention, but not in view of the prior art. Additionally, claims 5, 6, 11, and 17-20 will have been canceled without prejudice or disclaimer of the subject matter. Further, claims 22-29 will have been submitted for consideration by the Examiner in charge of the present application.

In view of the herein contained amendments and remarks, Applicant respectfully requests reconsideration and withdrawal of each of the outstanding rejections and objection set forth in the outstanding Official Action. Such action is now believed to be appropriate and proper and is thus respectfully requested, in due course.

Initially, Applicant respectfully thanks the Examiner for indicating his consideration of the documents filed in the Information Disclosure Statements filed in the present application on August 12, 2008 and October 3, 2008, by the return of an appropriately annotated copy of the PTO 1449 form attached to the above noted Information Disclosure Statement of August 12, 2008.

In the outstanding Official Action, the Examiner objected to claim 14 because of a noted language informality. By the present response, Applicant has amended claim 14 to eliminate the noted language informality. Applicant respectfully thanks the Examiner for bringing this matter to his attention so that it could be corrected.

In the outstanding Official Action, the Examiner rejected claims 1, 5, 8, 13-16, 19 and 20 under 35 U.S.C. § 103(a) as being unpatentable over MIYAZAKI (Japanese Unexamined Patent No. SHO 63--234 937) in view of MASAMI (Japanese Patent No. 08--163408). Claims 2-4, 10, and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over MIYAZAKI in view

of MASAMI and further in view of LUO (U.S. Patent No. 7, 031, 549). Claims 6, 7, 17 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over MIYAZAKI in view of MASAMI and further in view of KATO (U.S. patent number 7, 136, 100). Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over MIYAZAKI in view of MASAMI and further in view of LUO. Claim 12 was rejected under 35 U.S.C. § 103(a) as being unpatentable over MIYAZAKI in view of MASAMI and further in view of LUO, further in view of KATO, and further in view of JOGO.

Applicant respectfully traverses each of the above noted rejections and submits that they are inappropriate with respect to the particular combinations of features recited in each of Applicant's claims prior to the herein-contained claim amendments and even more certainly in view of such claim amendments. In particular, Applicant respectfully submits that no proper combination of the above-noted documents contain disclosures that are adequate or sufficient to anticipate or even to render obvious the combination of features recited in Applicant's claims. Further, Applicant respectfully submits that even if combined as proposed by the Examiner, the disclosures of the above-noted references would not teach, disclose, suggest, or render obvious the specific combinations of features recited in each of Applicant's claims.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of each of the above noted rejections together with an indication of the allowability of all of the claims pending in the present application, including the newly submitted claims, in due course.

Without in any manner acquiescing in the propriety of the above noted rejections, Applicant has, by the present response, amended claim 1 by incorporating therein the substantive limitations of claim 6, has amended claim 13 by incorporating therein the substantive limitations of claim 17, and has amended claim 14 by incorporating therein the substantive limitations of

claim 18. Claims 6, 17 and 18 have accordingly been canceled. The independent claims have been amended merely in order to expedite the examination and allowance of the present application but without in any manner acquiescing in any of the Examiner's rejections.

Applicant's invention is directed to a filtering device, a digital camera, and a filter processing method. Utilizing the filtering device recited in claim 1 as a nonlimiting example of Applicant's invention, the present invention is directed to a filtering device which filters original image data, the original image data having original luminance data and color difference data. The device includes a generating processor that generates first luminance data and second luminance data such that the original luminance data is separated into the first luminance data and the second luminance data according to a predetermined ratio, wherein the original image undergoes a gamma correction using a first gamma curve so as to generate the first luminance data and the original image undergoes a second gamma correction using a second gamma curve so as to generate the second luminance data, the second gamma curve being different from the first gamma curve. A filtering processor filters the second luminance data by a low pass filter so as to transform the second luminance data into third luminance data while the first luminance data and the color difference data are not low pass filtered. A synthesizing processor synthesizes the first luminance data, the color difference data, and the third luminance data into synthesized image data without synthesizing filtered color difference data, wherein the third luminance data defines a blurred luminance image and the synthesized image data comprises a soft focus image in which the color balance of the original image data is preserved.

As noted above, Applicant has amended the independent claims by incorporating features from a dependent claim therein merely in order to expedite the prosecution and allowance of the claims in the present application but without acquiescing in the propriety of the

outstanding rejections. In this regard, Applicant respectfully submits that the combination of MIYAZAKI and MASAMI, as proposed by the Examiner, does not disclose the combinations of features recited in Applicant's claims even prior to the above-noted amendments.

Nevertheless, and as noted above, Applicant has by the present response, amended the claims so as to define that the first luminance data is generated by the use of a first gamma curve and that the second luminance data is generated by the use of the second gamma curve, wherein the second gamma curve is different than the first gamma curve. Applicant's claims further recite that the first luminance data and the third luminance data (which is based upon the second luminance data) are synthesized. None of the references of record teach at least these additional features, in the claimed combinations.

In this regard, Applicant notes that in addressing the limitations of claim 6, the Examiner relied on the disclosure of KATO to teach first and second gamma curves. However, the disclosure, by KATO, of gamma curves is significantly different than the recitation of such curves in Applicant's pending claims.

In particular, KATO shows first and second gamma curves in figures 4A and 4B. However, such gamma curves are selectively utilized in accordance with control signals from the CPU 25. In this regard, the Examiner's attention is respectfully directed to Column 6, lines 9-19 of KATO. However KATO does not disclose the use of a first gamma curve to generate first luminance data and a second gamma curve to generate second luminance data, wherein the first and second luminance data (after low pass filtering) are to be utilized (i.e., synthesized) as recited in the respective pending claims. KATO merely teaches that linear or nonlinear gamma correction can selectively be utilized.

Thus, even if the disclosure of KATO were to be combined with the disclosures of the several other references relied upon, the combination would not result in the invention as recited in Applicant's claims. For this additional reason it is respectfully submitted that each of Applicant's claims are clearly patentable over the combination of references asserted by the Examiner thereagainst.

By the present response, Applicant has submitted a number of dependent claims for consideration by the Examiner. These claims are submitted in order to provide Applicant with the scope of protection to which he is entitled for the invention disclosed in the present application. Moreover, these claims are submitted to be patentable based upon their dependence from a shown to be allowable base claim as well as based upon their own respective recitations.

Merely as an example, Applicant notes that the newly submitted claims 27-29 define that the first gamma curve has zero offset and the second gamma curve has a non-zero offset. This feature of Applicant's invention is explicitly disclosed at figure 4 and described, inter alia, at page 14, line 15 through page 15, line 16. The additional features recited in these claims are not taught, disclosed, suggested, or rendered obvious by any of the references relied upon in the outstanding Official Action. In particular, none of the relied upon references disclose the utilization of first and second gamma curves as defined in the manner recited in Applicant's claims 27-29. In this regard Applicant notes that both of the gamma curves illustrated in figures 4A and 4B of KATO have zero offset. Accordingly, the recitations of these claims provide yet additional bases for the patentability thereof, in addition to the basis provided by the independent claims from which they depend, as set forth above.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejections, consideration of the newly submitted claims and an indication of the allowability of all the claims pending in the present application.

SUMMARY AND CONCLUSION

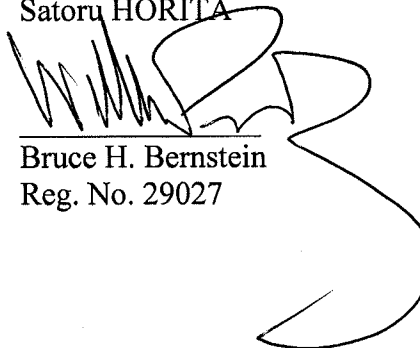
Applicant has made a sincere effort to place the present application in condition for allowance and believes that he has now done so. Applicant has amended the claims to eliminate any basis for objection thereto or for rejection thereof based on the prior art of record in the present application. Applicant has discussed the disclosures of the references and has pointed out the deficiencies thereof with respect to the claims pending herein. Applicant's has noted the shortcomings of the disclosures of the references combined by the Examiner with respect to the explicit recitations of Applicant's claims. Accordingly, Applicant has provided a clear evidentiary basis supporting the patentability of all of the claims in the present application and respectfully requests an indication to such effect, in due course.

Applicant has submitted a number of new claims for consideration by the Examiner and with respect to such claims has provided a clear basis for the patentability thereof.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Examiner have any questions or comments regarding this Response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully Submitted,
Satoru HORITA

A handwritten signature in black ink, appearing to read 'Bruce H. Bernstein', is written over a horizontal line. The signature is stylized with multiple loops and a long, sweeping tail that extends downwards and to the right.

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